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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/137,127 08/20/98 WARD

I 604-451

EXAMINER

IM62/0203

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PRATT, C

ART UNIT

PAPER NUMBER

1771

DATE MAILED:

02/03/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

*MAIL*

**Office Action Summary**

Application No.

09/137,127

Applicant(s)

WARD ET AL

Examiner

Christopher C. Pratt

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/12/99.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some \* c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☒ received.
2. ☒ received in Application No. (Series Code / Serial Number) 09137127.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

**Attachment(s)**

- 14) ☒ Notice of References Cited (PTO-892)
- 15) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.

- 17) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Specification***

1. The following guidelines illustrate the preferred layout and content for patent applications. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

2. The following order or arrangement is preferred in framing the specification and, except for the reference to "Microfiche Appendix" and the drawings, each of the lettered items should appear in upper case, without underlining or bold type, as section headings. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) Title of the Invention.
- (b) Cross-References to Related Applications.
- (c) Statement Regarding Federally Sponsored Research or Development.
- (d) Reference to a "Microfiche Appendix" (see 37 CFR 1.96).
- (e) Background of the Invention.
  - 1. Field of the Invention.
  - 2. Description of the Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) Brief Summary of the Invention.
- (g) Brief Description of the Several Views of the Drawing(s).
- (h) Detailed Description of the Invention.
- (i) Claim or Claims (commencing on a separate sheet).
- (j) Abstract of the Disclosure (commencing on a separate sheet).
- (k) Drawings.
- (l) Sequence Listing (see 37 CFR 1.821-1.825).

### ***Drawings***

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3. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81. No new matter may be introduced in the required drawing.

***Claim Objections***

4. Claims 1-25 objected to because of the following informalities: the word "fibre" should be changed to fiber. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 25 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 25 recites the limitation "recrystallized melt phase." The meaning of this term is unclear.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-6, 9-18, 22-25 rejected under 35 U.S.C. 102(b) as being anticipated by Turner (4662887).

Turner patent is concerned with the creation of high modulus endoprosthetic device (abstract). Turner discloses the use of a composite material comprising an inorganic filler material and a fibrous polymeric material characterized in that the fibrous material comprises oriented polymeric fibers fused together to form a continuous matrix while retaining fibrous structure in the composite (col. 3, lines 8-22, 35-52).

Turner also discloses the use of chopped and void free fibers (col. 3, lines 55-60).

Turner also discloses the use of particulate filler (col. 6, lines 49-50).

Turner also discloses the use of a filler selected from applicant's group of claim 5 (col. 1, lines 35-50).

Turner also discloses the use of a biocompatible inorganic filler (col. 4, lines 15-17).

With respect to claims 9 and 10, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

With respect to claims 11-18, Turner discloses a composite material having a flexural modulus and strength within applicant's ranges (examples 1-5).

With respect to claims 22-24, Turner discloses the use of high modulus polyethylene (col. 3, lines 16-23).

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With respect to claim 25, Turner discloses a recrystallized melt phase of the polymeric material which has a melting point less than that of the oriented fiber and which binds the fiber material together (col. 4, lines 25-29).

8. Claims 19-21 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Turner. Turner anticipates all claims to which claims 19-21 are dependent upon. Because claims 19-21 describe properties of the invention anticipated by Turner they are inherent in the invention of Turner, although not explicitly stated.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 7-8 rejected under 35 U.S.C. 103(a) as being unpatentable over Turner (4662887) in view of Dorman (4842604).

Turner patent is concerned with the creation of high modulus endoprosthesis device (abstract). Turner teaches all elements of applicant's claims 1-6 to which claims 7-8 refer, as stated above in 102 rejections. Turner fails to teach the use of said biocompatible material to be apatite or hydroxyapatite.

Dorman's patent is concerned with the creation of composite material useful as a prosthesis. Dorman teaches the use of apatite and hydroxyapatite as a biocompatible

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material (col. 5, lines 30-38). It would have been obvious to a person of ordinary skill in the art to combine the composite of Turner with the biocompatible material taught by Dorman. Such a combination would have been made by the reasoned expectation of providing Turner's composite prosthetic with a biocompatible material which would allow for bone growth as taught by Dorman (col. 1, lines 23-35).

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Howard (5292584) and Shikinami (5711960) both seem to disclose elements of applicant's invention

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Pratt whose telephone number is 703-305-6559. The examiner can normally be reached on Monday - Friday from 7 am to 4 pm.

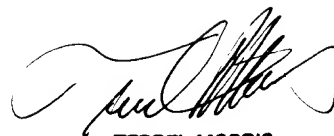
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5408 for regular communications and 703-308-2351 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2351.

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A handwritten signature in cursive script, appearing to read "Christopher C. Pratt".

Christopher C. Pratt  
January 12, 2000

A handwritten signature in cursive script, appearing to read "Terrel Morris".

TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700